

**Exhibit 6. Measured Data-----47 CFR. 2.1041 AND 2.1033 (C) (14)**

**6.1. RF Power** -- Pursuant 47 CFR 2.1046 and 2.1033 (C) (6) & (C) (7) and 90.635 (d)

*(a) Output Power*

The RF power output was measured with the indicated voltage applied to and current into the final RF amplifying device (U503). The DC power and current listed below represents values measured during a 15ms transmission slot corresponds to the maximum and minimum pulse average output power listed below. The power values listed are compliant with the requirements of 47 CFR 90.635 (d).

Maximum Output Power:

|  |       |           |                       |
|--|-------|-----------|-----------------------|
| Measured RF output                             | 720   | milliWatt | Pulse Average Power   |
| Normal DC Voltage                              | 3.6   | Volts     |                       |
| Normal DC Current                              | 180   | mA        | Pulse Average Current |
| Input Power for the Final RF Amplifying Module | 0.141 | milliWatt |                       |

Minimum Output Power:

|  |       |           |                       |
|--|-------|-----------|-----------------------|
| Measured RF output                             | 0.19  | milliWatt | Pulse Average Power   |
| Normal DC Voltage                              | 3.6   | Volts     |                       |
| Normal DC Current                              | 90    | mA        | Pulse Average Current |
| Input Power for the final RF Amplifying Module | 0.562 | microWatt |                       |

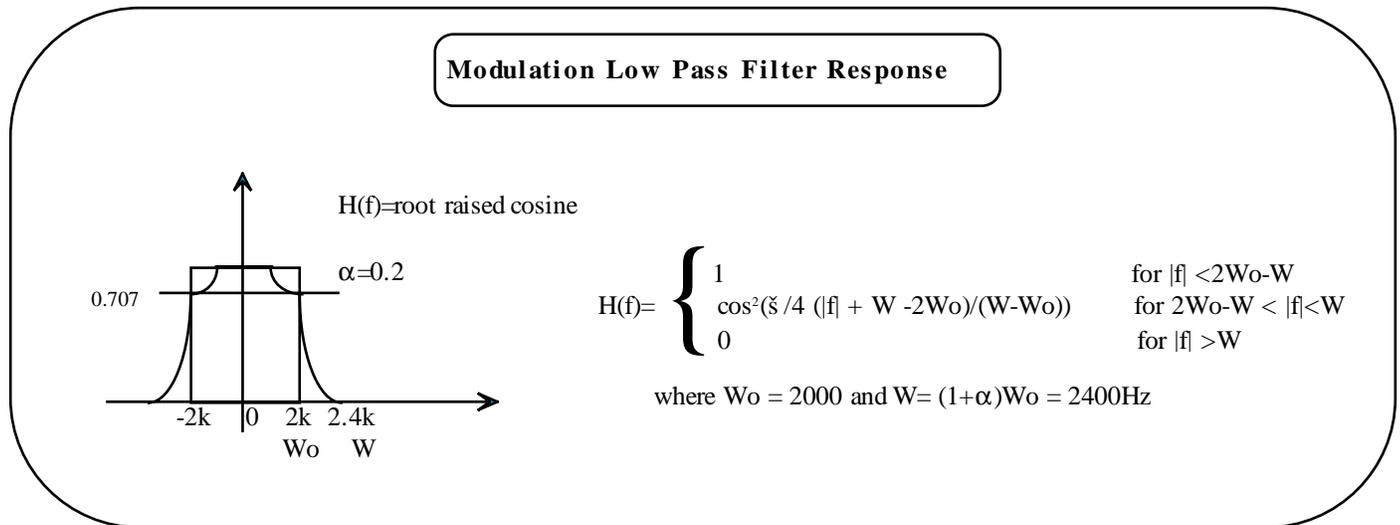
*(b) Effective Radiated Power (ERP)*

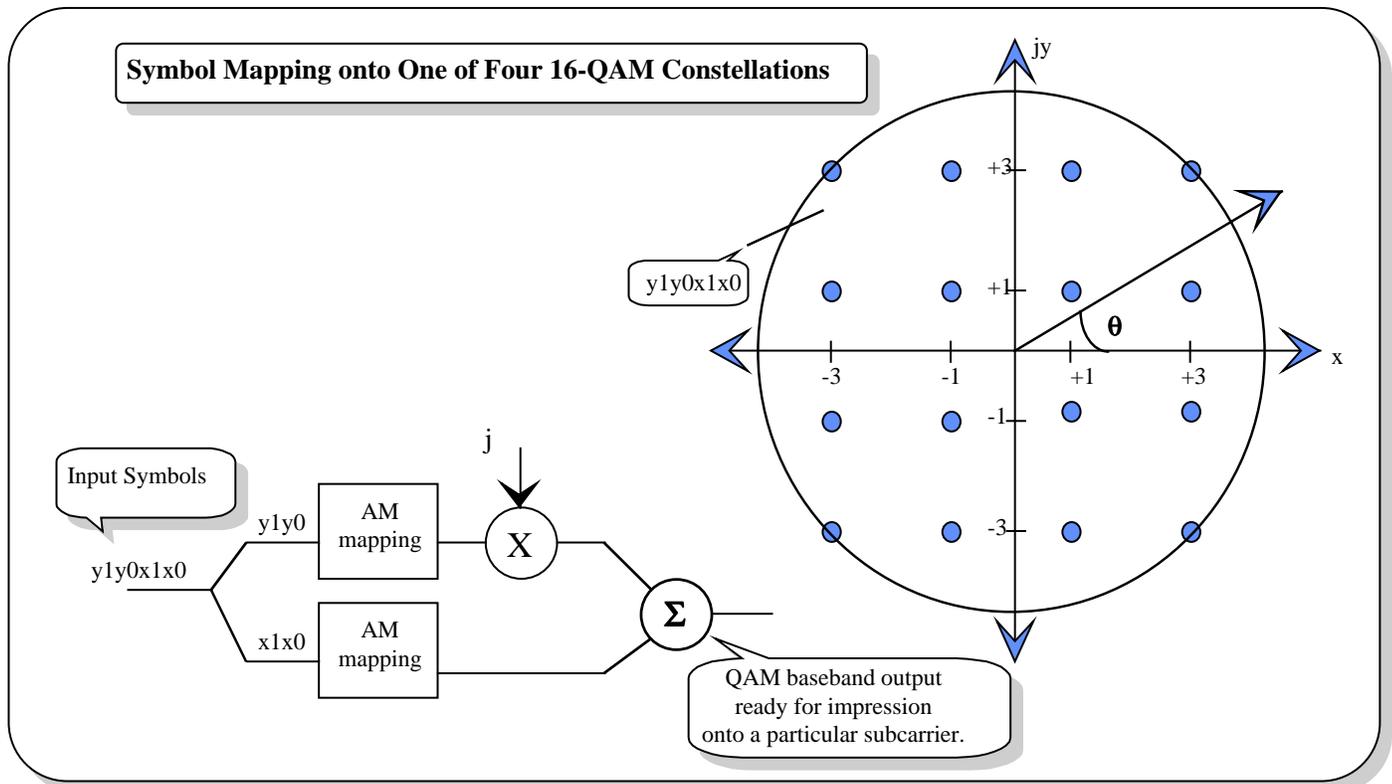
ERP is the product of the output power and the gain of the integral antenna relative to a dipole. Data was obtained using 1/6 multiplexing then scaled for other multiplexing factors as shown in the following table.

| <b>2/6 Multiplexing</b><br>(33.33 % duty cycle)<br>Telephone mode (standard) | <b>1/6 Multiplexing</b><br>(16.67 % duty cycle)<br>Dispatch radio mode, or<br>optional telephone mode | <b>COMMENTS</b>   |
|--|---|---|
| 0.125 to 474milliwatt  |   | Mean ERP limits over any 15ms transmission pulse. Operational ERP is set by base station control. |
| 0.042 to 158milliwatt  | 0.021 to 79 milliwatt   | Mean ERP limits over any 1.8sec interval. Operational ERP is set by base station control          |

6.2. Modulation Characteristics Data -- Pursuant 47 CFR 2.1047 (d) & 2.1033 (C)(13)

The digital data (from the speech coder) is mapped to predetermined fixed magnitude and phase components within the 16QAM constellations (see Figure 6 -illustrating one of the four member constellations). This adjusts the amplitude and phase variations of the base-band signal to one of the 16 points on the constellation. After conversion by the D/A converters in U601 (see Figure 4-3 in Exhibit 4.3), the bandwidth of the modulating signals is limited by the pair of modulation limiting low pass filters. These filters serve to limit out-of-band and spurious emissions due to modulation. The transfer response of these filters is depicted in the figure shown below.





**6.3. Occupied Bandwidth Data -- Pursuant 47 CFR 2.1049, 90.210 and 90.691**

The method described in paragraph 7.2 was employed with the following conditions:

- 64K Bits Per Second Pseudo-Random Digital Modulation
- Horizontal: 10 kHz/div
- Vertical: 10 dB/div
- Carrier Reference: 0 dB corresponds to 0.6 watts (+27.8dBm) average power for maximum power condition and 0.007 watts (+8.5dBm) for minimum power condition.

In Figures 6-1 to Figure 6-8, trace 2 (transmitter performance) was measured using a resolution bandwidth of 300 Hz, while trace 1(reference level) was obtained using a resolution bandwidth of 30 kHz. Trace 3 is the applicable emission mask.

Measured Data

Refer to Figures 6-1, 6-2, 6-5, and 6-6 for performance relative to mask 47 CFR 90.210(g).

Refer to Figures 6-3 , 6-4, 6-7 and 6-8 for performance relative to mask 47 CFR FCC 90-691(a).

FCC Limits

a.) Per 47CFR 90.210(g)

(1) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 5 kHz up to and including 10 kHz: At least  $83 \log_{10}(f_d/5)$  decibels.

(2) On any frequency removed from the center of the authorized bandwidth by a displacement frequency ( $f_d$  in kHz) of more than 10 kHz up to and including 250 percent of the authorized bandwidth:

At least  $116 \log_{10}(f_d/6.1)$  decibels or 50 plus  $10 \log_{10}$  (Unmodulated Carrier Power) decibels or 70 decibels, whichever is lesser attenuation.

(3) On any frequency removed from the center of the authorized bandwidth by more than 250 percent of the authorized bandwidth:

At least 43 plus  $10 \log_{10}$  (Output Power in Watts) decibels or 80 decibels, whichever is lesser attenuation.

b.) Per EA SMR Emission Mask, 47 CFR 90.691(a):

Out-of-band emission requirement shall apply only to the “outer” channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees.

1. For any frequency removed from the EA licensee’s frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power ( $P$ ) in watts by at least  $116 \log_{10}(f/6.1)$  decibels or  $50 + 10 \log_{10}(P)$  decibels or 80 decibels, whichever is the lesser attenuation, where  $f$  is the frequency removed from the center channel of the outer channel in the block in kilohertz and where  $f$  is greater than 12.5 kHz.
2. For any frequency removed from the EA licensee’s frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power ( $P$ ) in watts by at least  $43 + 10 \log_{10}(P)$  decibels (i.e. -13dBm) or 80 decibels, whichever is the lesser attenuation, where  $f$  is the frequency removed from the center of the outer channel in the block in kilohertz and where  $f$  is greater than 37.5 kHz.

Figure 6-1: Quad-16QAM Modulation performance relative to mask 47 CFR 90.210(g).

MAX. POWER SETTING:

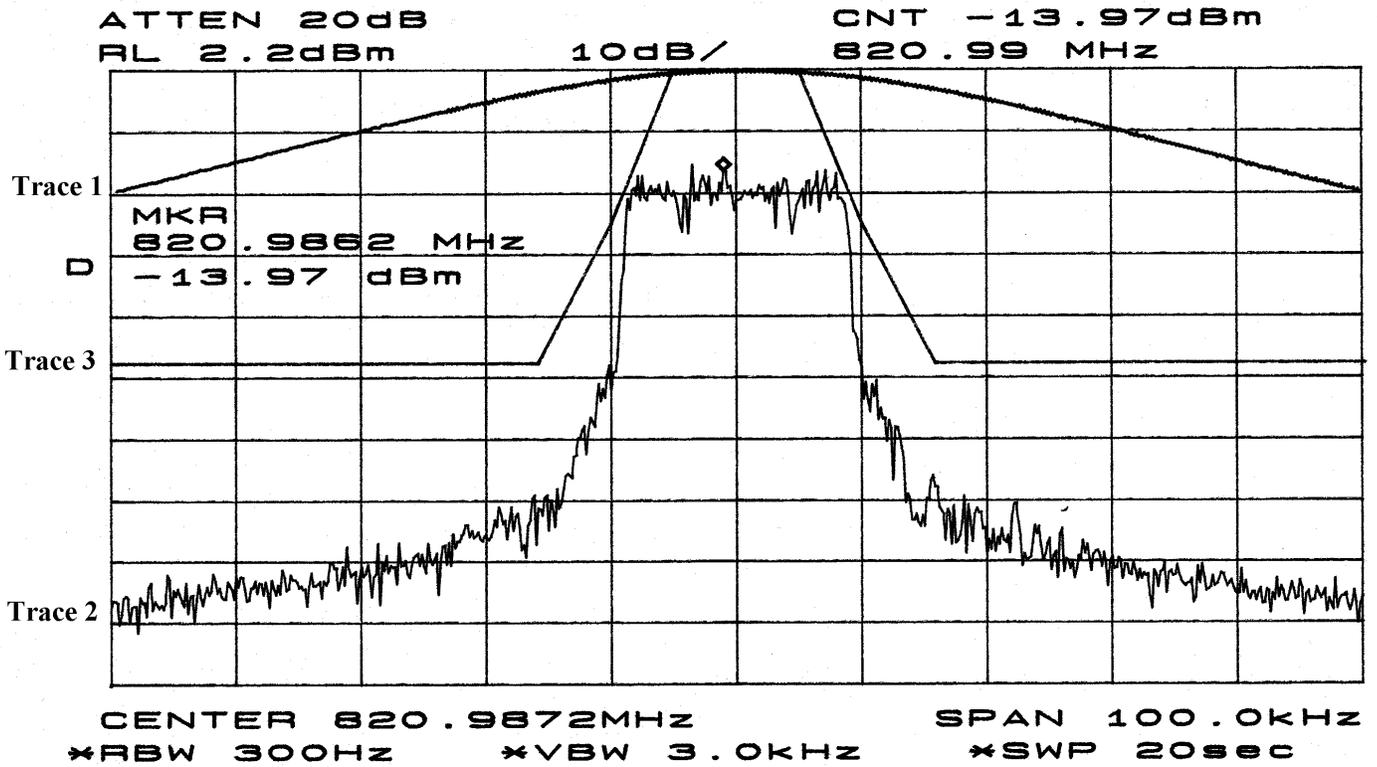


Figure 6-2: Quad-16QAM Modulation performance relative to mask 47 CFR 90.210(g).

MIN. POWER SETTING:

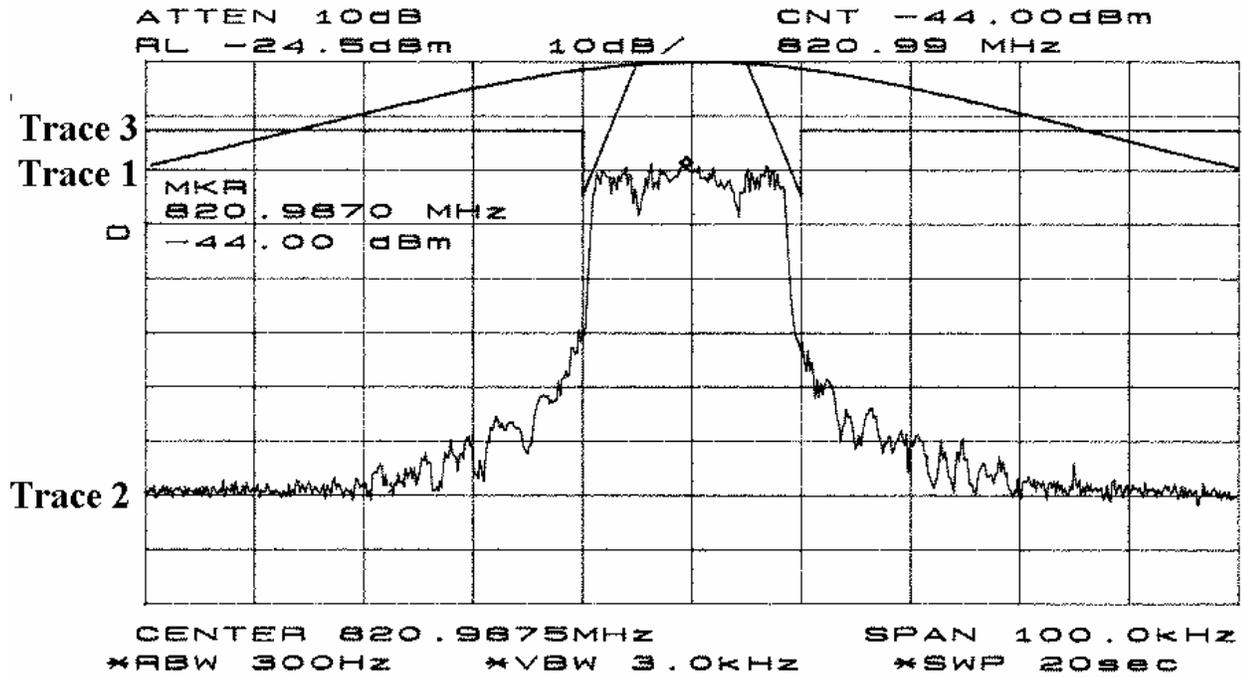


Figure 6-3: Quad-16QAM Modulation performance relative to mask 47 CFR 90.691(a).

MAX. POWER:

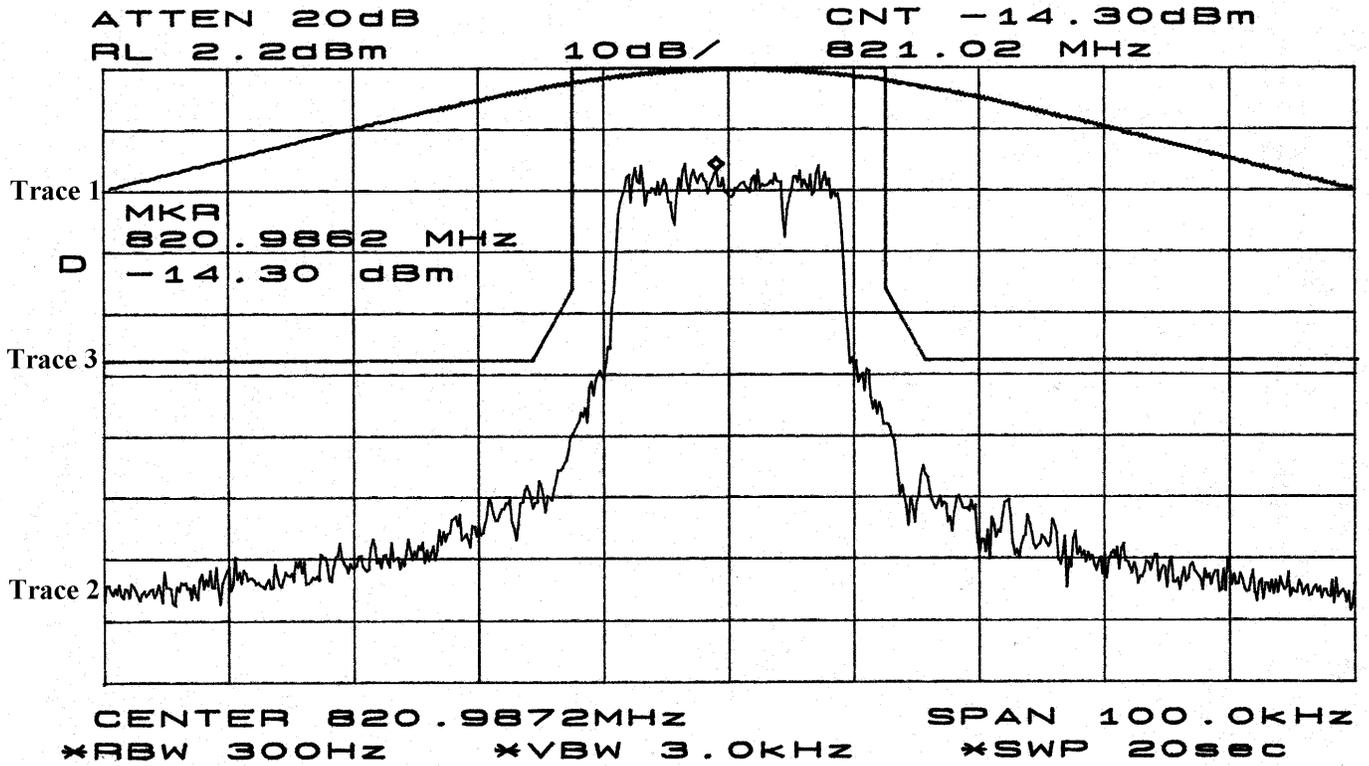


Figure 6-4: Quad-16QAM Modulation performance relative to mask 47 CFR 90.691(a).  
MIN. POWER:

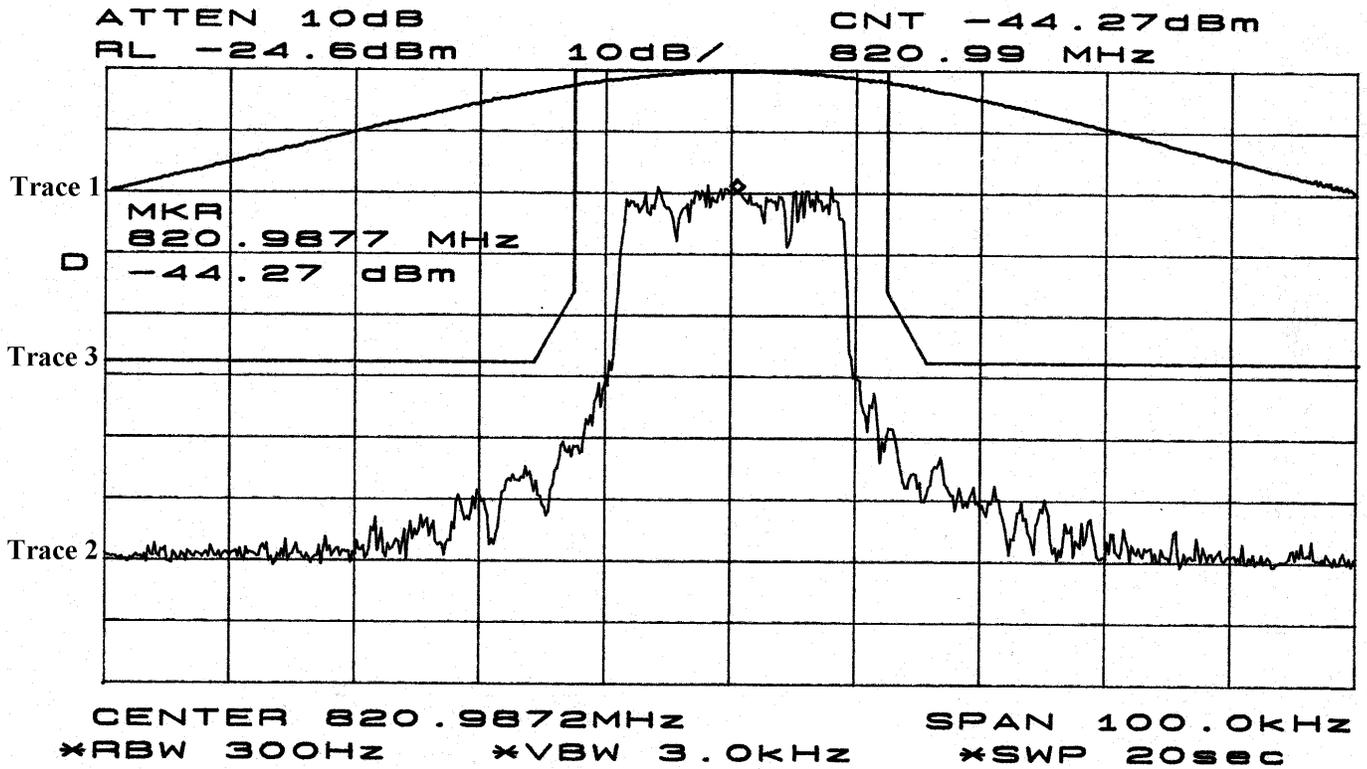


Figure 6-5: Quad-16QAM Modulation performance relative to mask 47 CFR 90.691(g).

MAX. POWER:

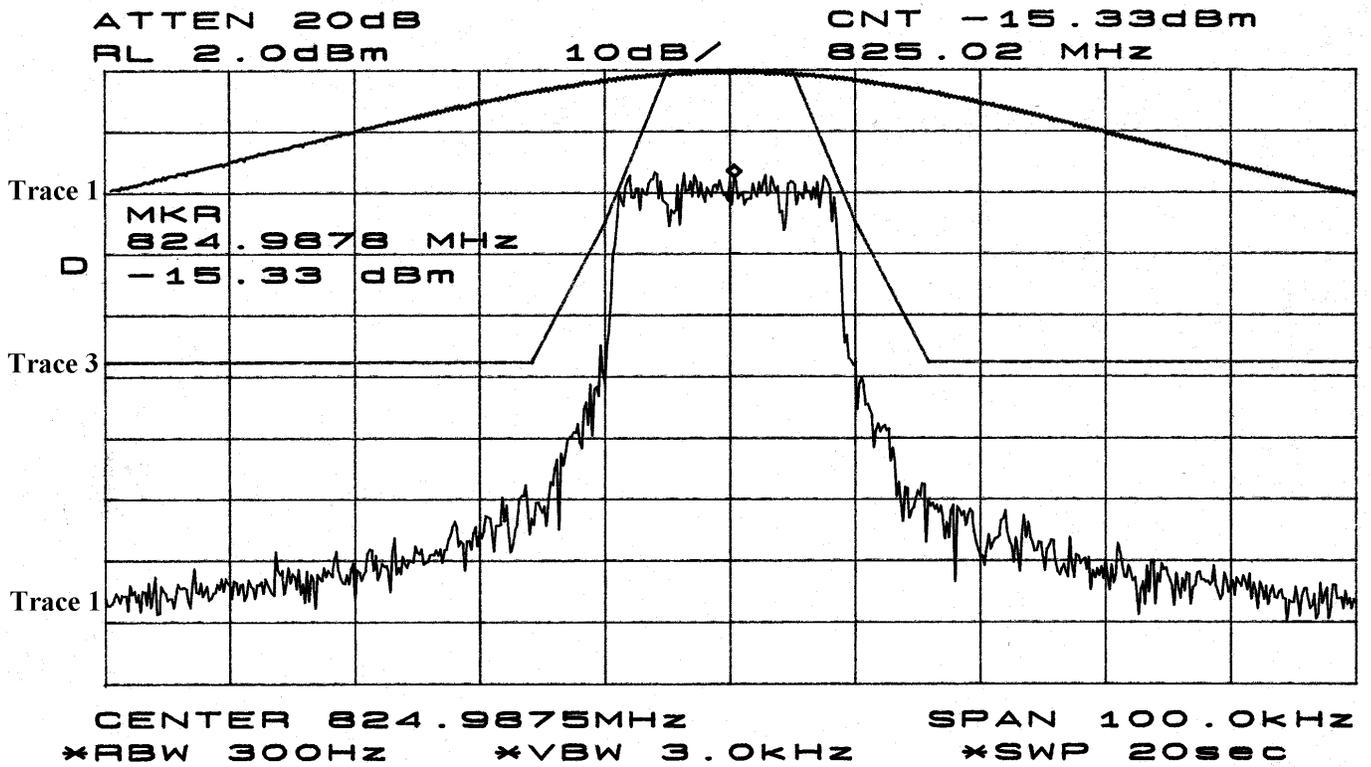


Figure 6-6: Quad-16QAM Modulation performance relative to mask 47 CFR 90.210(g).

MIN. POWER SETTING:

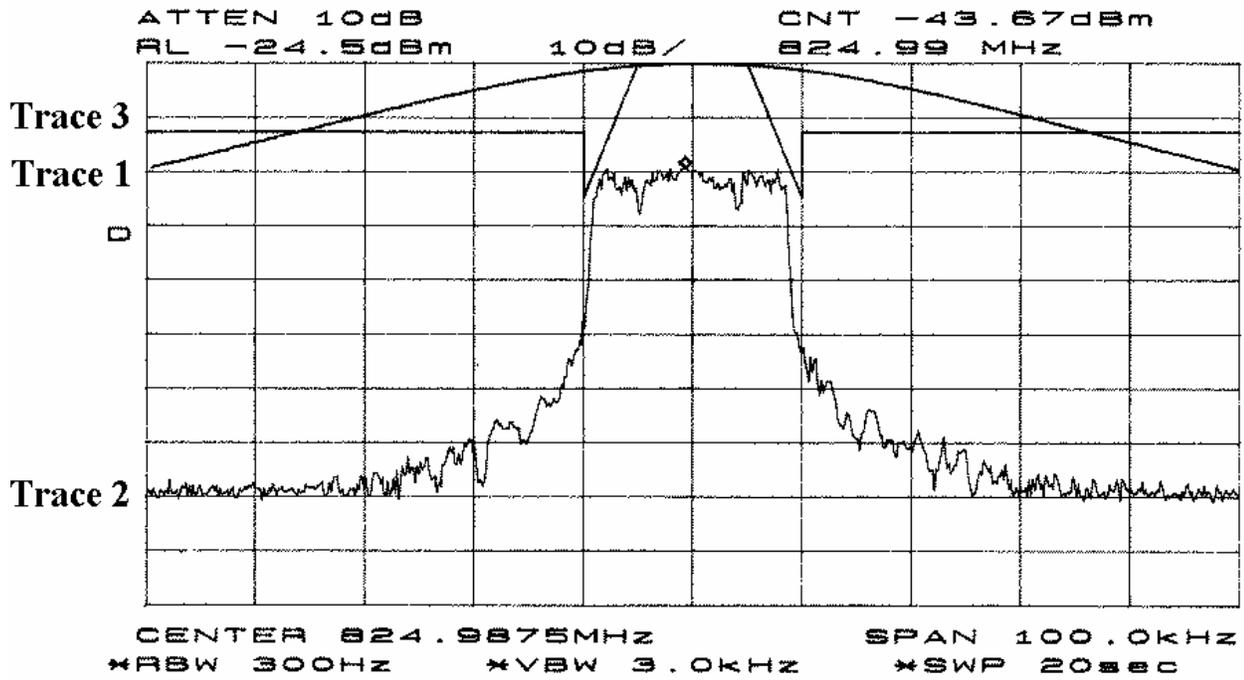


Figure 6-7: Quad-16QAM Modulation performance relative to mask 47 CFR 90.691(a).

MAX. POWER:

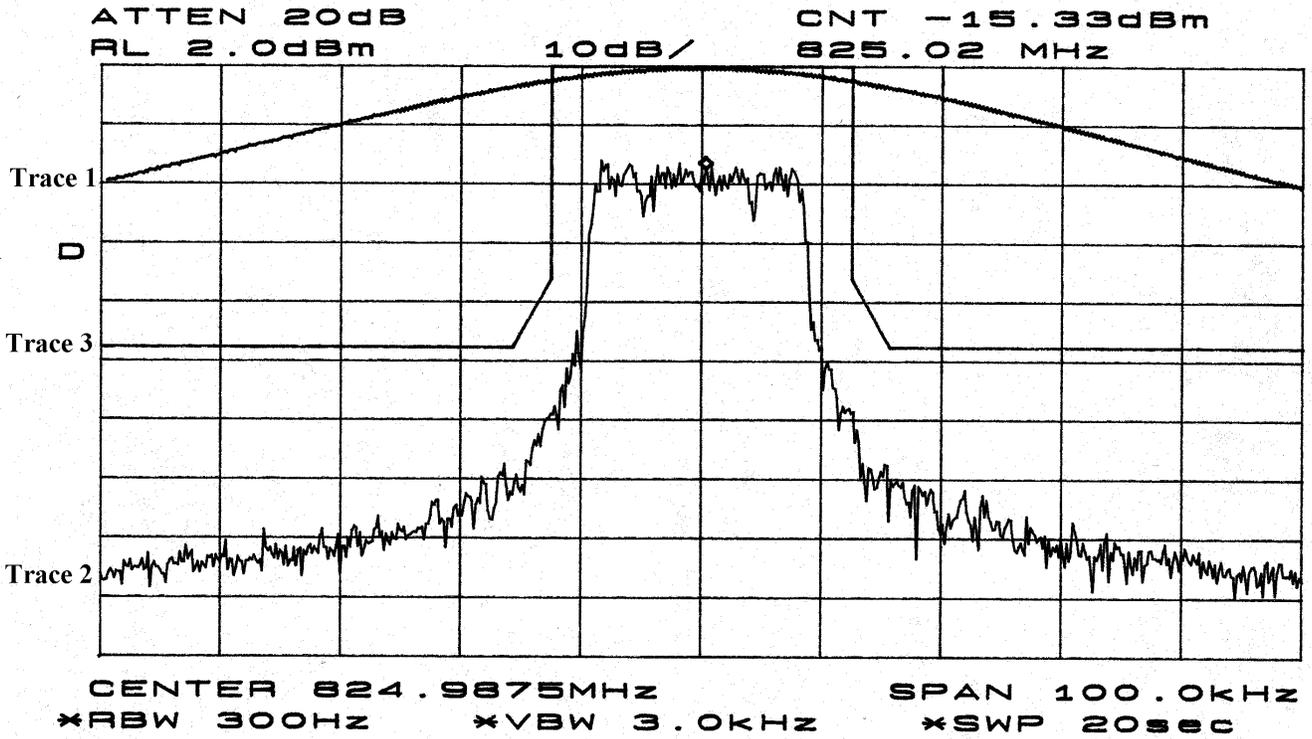


Figure 6-8: Quad-16QAM Modulation performance relative to mask 47 CFR 90.691(a).

MIN. POWER:

